

Introduction to Graphing

Seating Chart Example

In the beginning of the year, I created a seating chart for your class. I created 5 rows of desks with 6 desks in each row. Dan sits in the third row at the second desk (3,2) and Chelsea sits in the second row at the third desk (2,3). Are these seats the same?

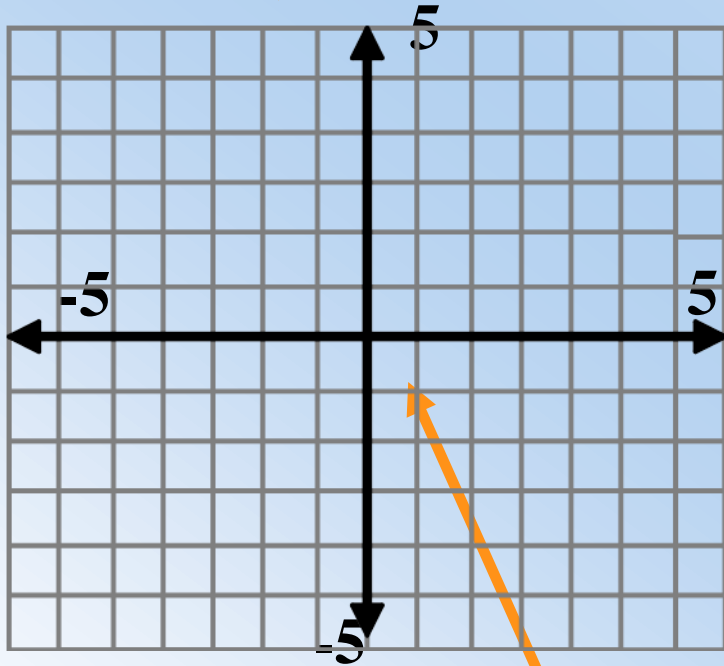
No!! The seats (3,2) and (2,3) are called ordered pairs because the order in which the pair of numbers is written is important!!

Who is sitting in desk (4,2)? **N**

4	A	B	C	D	E
3	F	G	H	I	J
2	K	L	M	N	O
1	P	Q	R	S	T
	1	2	3	4	5

Ordered pairs are used to locate points in a coordinate plane.

y-axis (vertical axis)

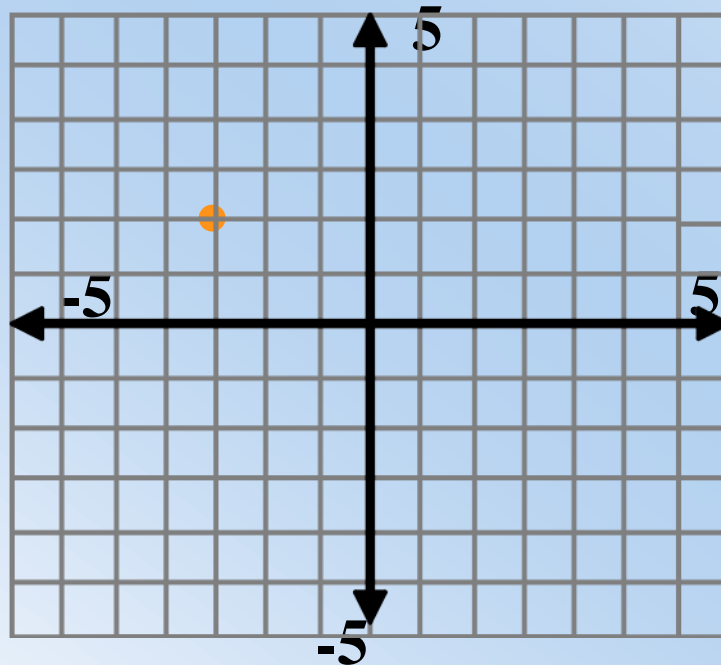


x-axis (horizontal axis)

origin (0,0)

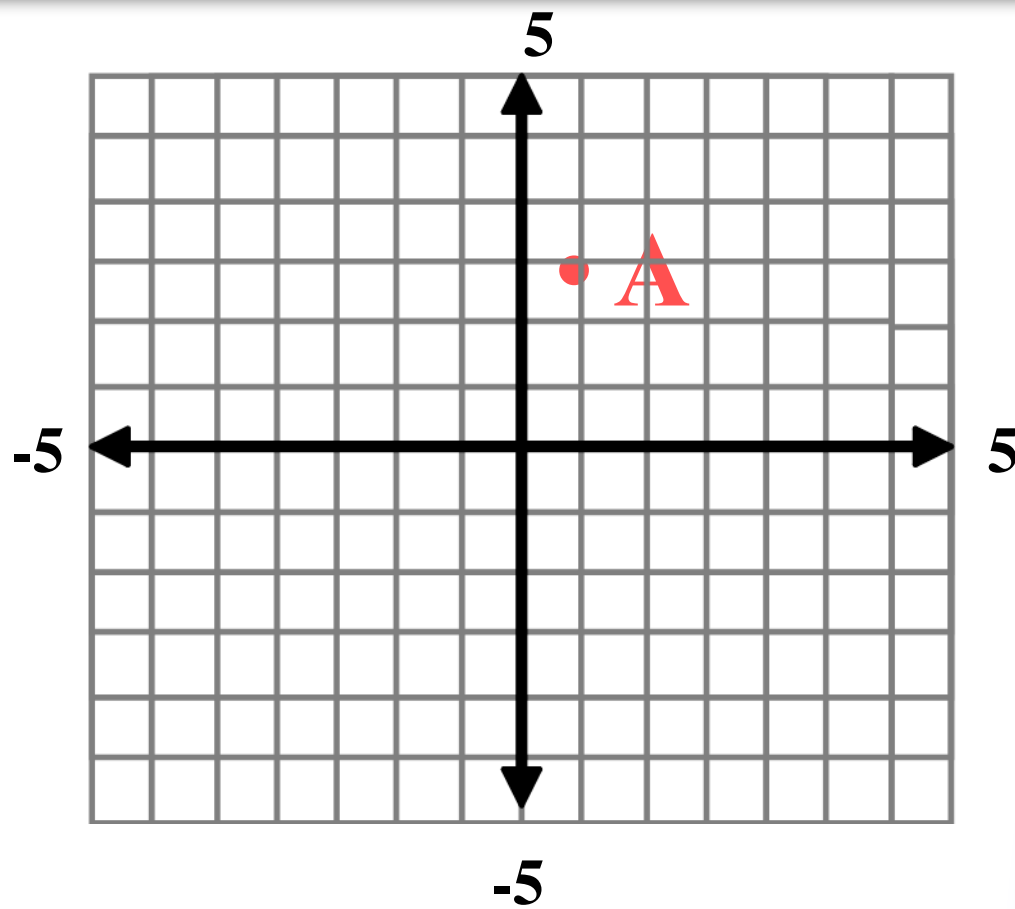
In an ordered pair, first is the x-coordinate.
The second number is the y-coordinate.

Graph. $(-3, 2)$



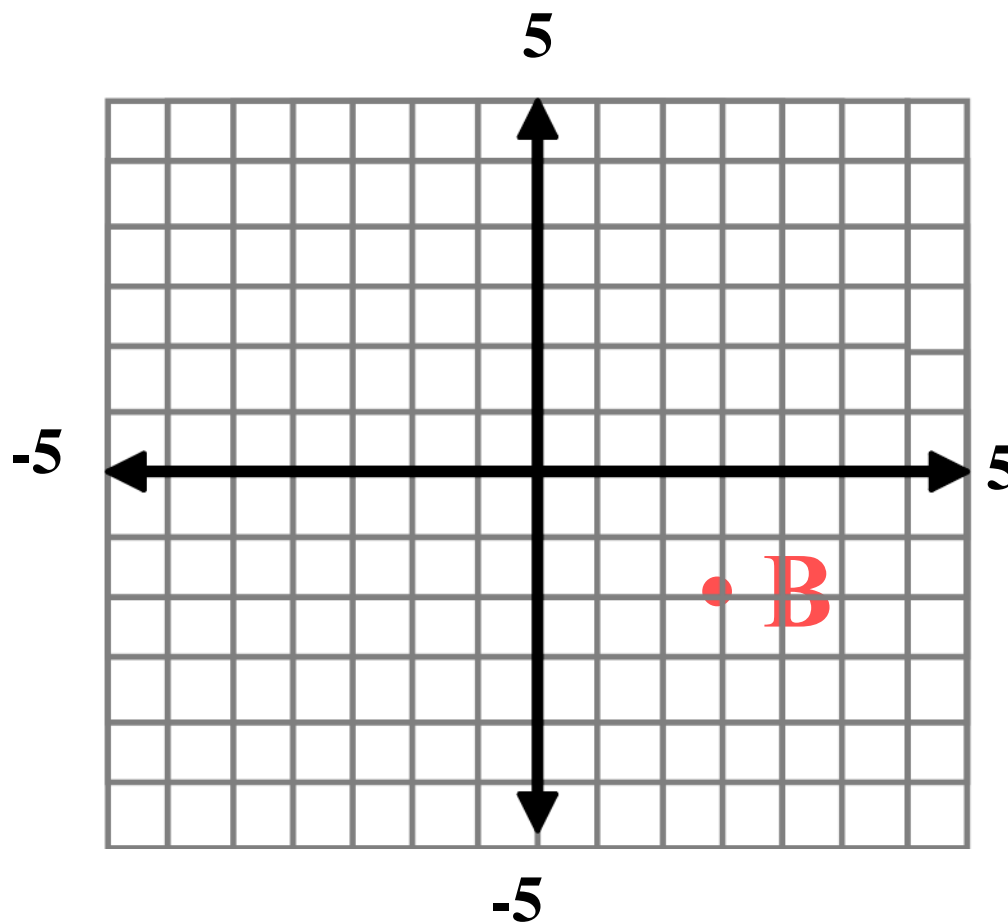
What is the ordered pair for A?

1. $(3, 1)$
2. $(1, 3)$
3. $(-3, 1)$
4. $(3, -1)$



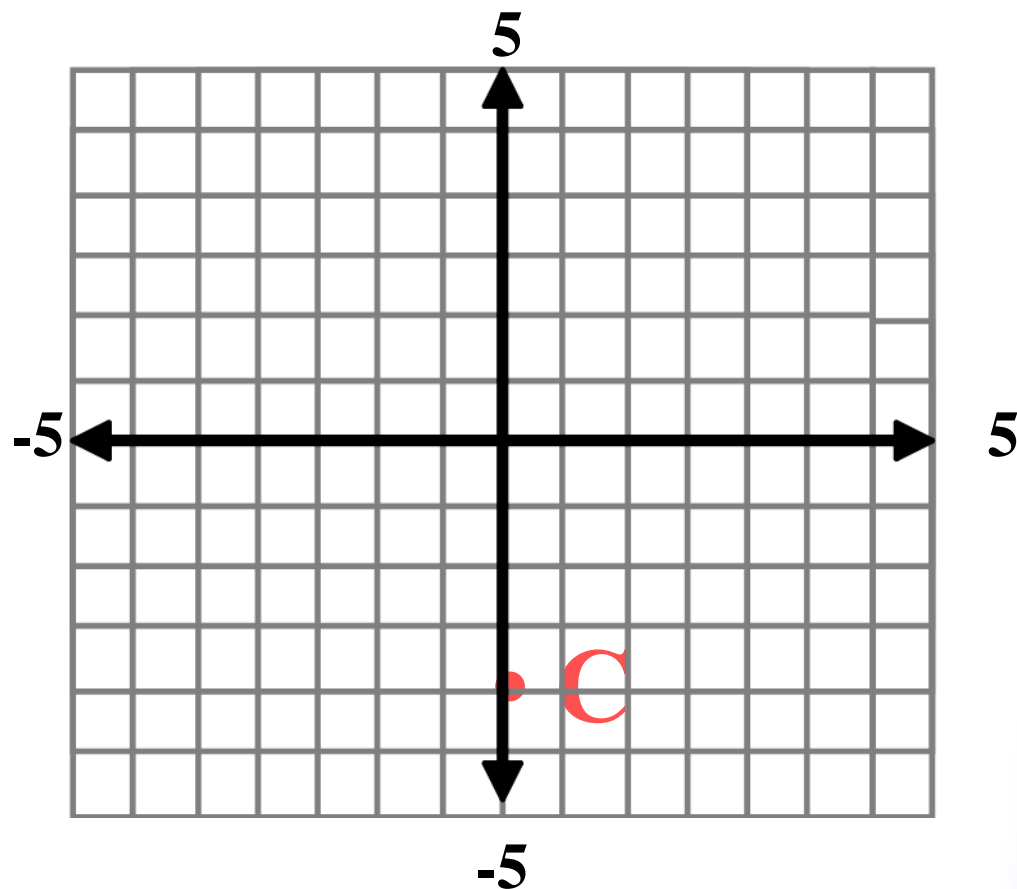
What is the ordered pair for B?

1. $(3, 2)$
2. $(-2, 3)$
3. $(-3, -2)$
4. $(3, -2)$



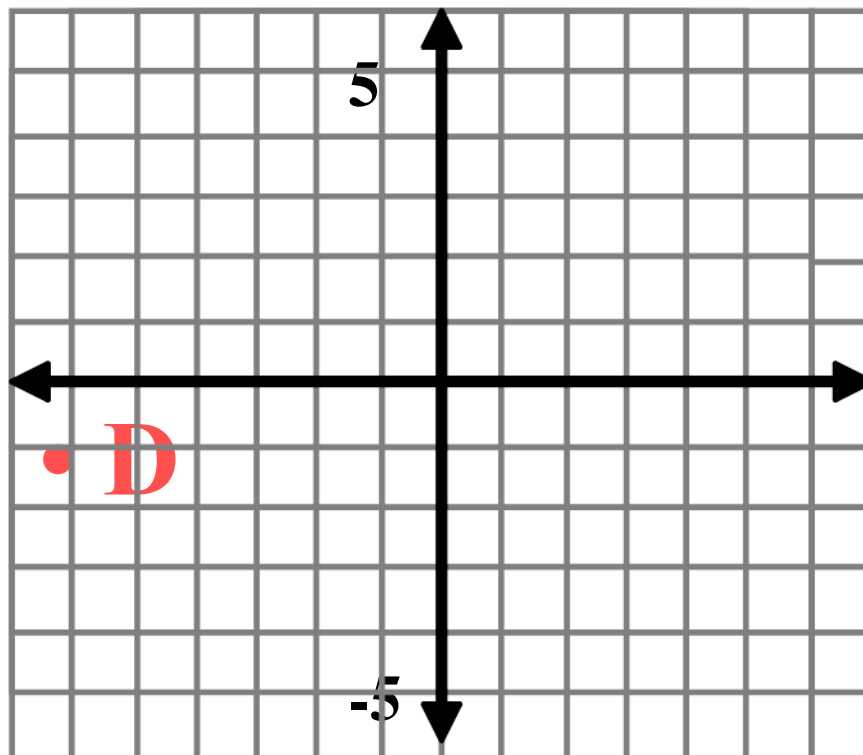
What is the ordered pair for C?

1. $(0, -4)$
2. $(-4, 0)$
3. $(0, 4)$
4. $(4, 0)$



What is the ordered pair for D?

1. $(-1, -6)$
2. $(-6, -1)$
3. $(-6, 1)$
4. $(6, -1)$



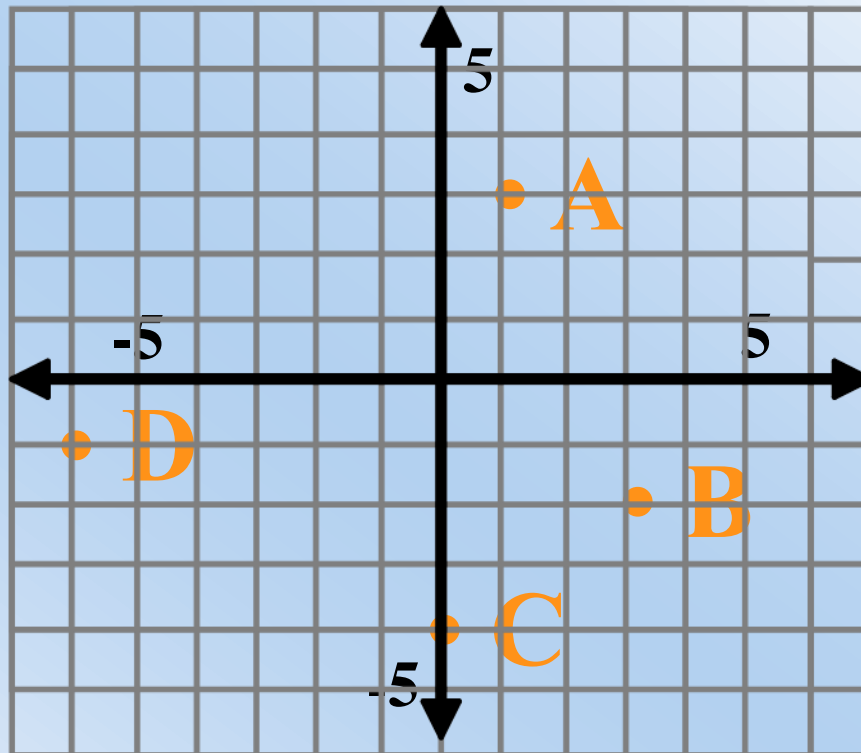
Write the ordered pairs that name points A, B, C, and D.

$$A = (1, 3)$$

$$B = (3, -2)$$

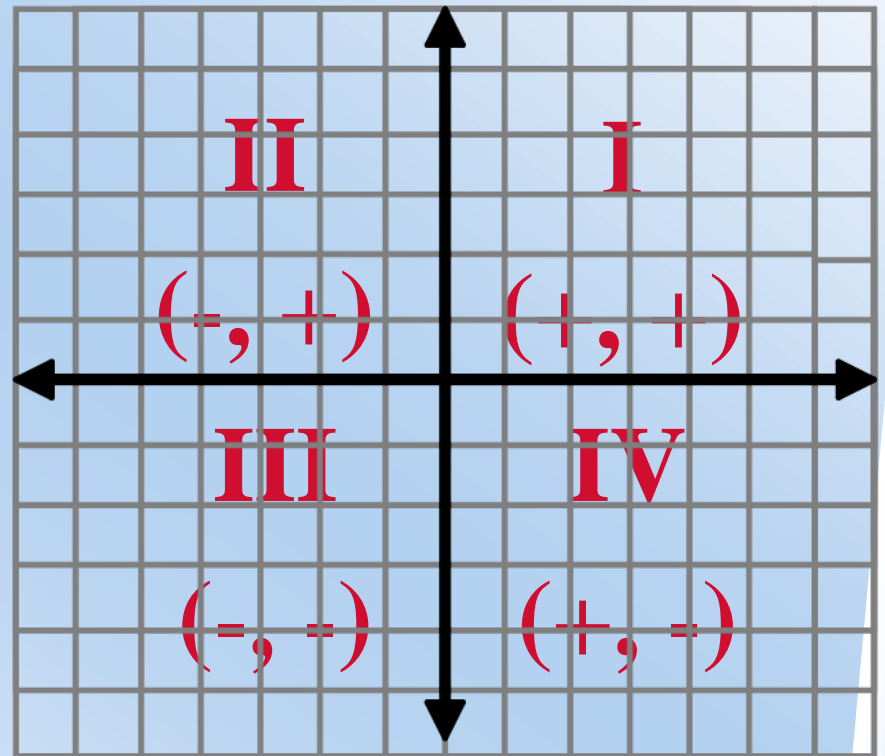
$$C = (0, -4)$$

$$D = (-6, -1)$$



Quadrants

The x-axis and y-axis separate the coordinate plane into four regions, called quadrants.



Name the quadrant in which each point is located: $(-5, 4)$

1. I
2. II
3. III
4. IV
5. None – x-axis
6. None – y-axis

Name the quadrant in which each point is located: $(-2, -7)$

1. I
2. II
3. III
4. IV
5. None – x-axis
6. None – y-axis

Name the quadrant in which each point is located: $(0, 3)$

1. I
2. II
3. III
4. IV
5. None – x-axis
6. None – y-axis